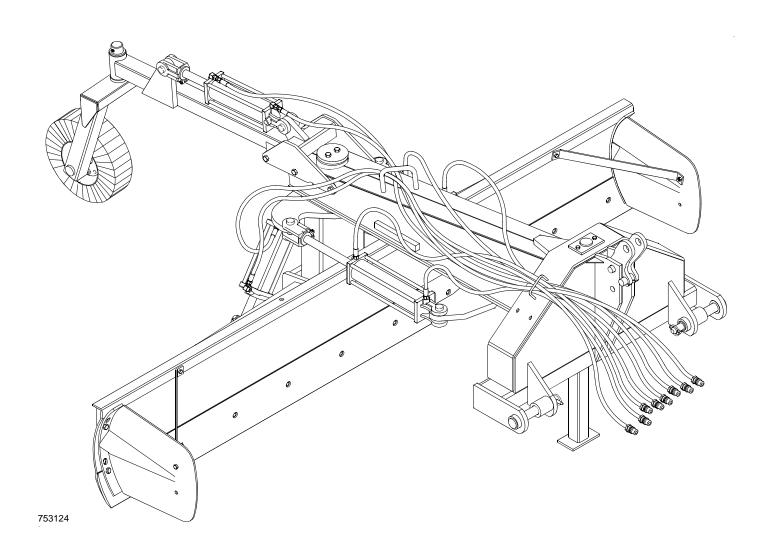
Rear Blades

RBT55120



301-172M Operator's Manual





Read the Operator's manual entirely. When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

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5/21/07

Cover photo may show optional equipment not supplied with standard unit.



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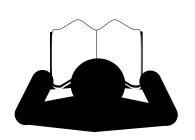
These are common practices that may or may not be applicable to the products described in this manual.

Safety at All Times

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Label" section, read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

- ▲ Operator should be familiar with all functions of the unit.
- ▲ Operate implement from the driver's seat only.
- ▲ Do not leave tractor or implement unattended with engine running.
- ▲ Dismounting from a moving tractor could cause serious injury or death.
- ▲ Do not stand between the tractor and implement during hitching.
- ▲ Keep hands, feet, and clothing away from power-driven parts.
- ▲ Wear snug fitting clothing to avoid entanglement with moving parts.
- ▲ Watch out for wires, trees, etc., when raising implement. Make sure all persons are clear of working area.
- ▲ Turning tractor too tight may cause implement to ride up on wheels. This could result in injury or equipment damage.





Look For The Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Be Aware of Signal Words

A Signal word designates a degree or level of hazard seriousness. The signal words are:

A DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be quarded.

A WARNING

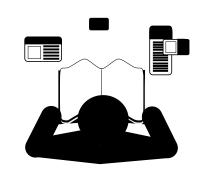
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

A CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

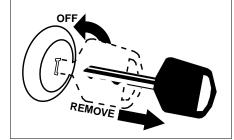
For Your Protection

▲ Thoroughly read and understand the "Safety Label" section, read all instructions noted on them.



Shutdown and Storage

- ▲ Lower machine to ground, put tractor in park, turn off engine, and remove the key.
- ▲ Detach and store implements in a area where children normally do not play. Secure implement by using blocks and supports.

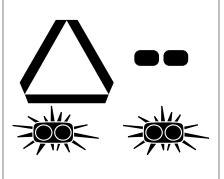


1

These are common practices that may or may not be applicable to the products described in this manual.

Use Safety Lights and Devices

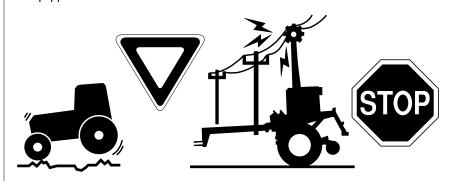
- ▲ Slow moving tractors, selfpropelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- ▲ Flashing warning lights and turn signals are recommended whenever driving on public roads. Use lights and devices provided with implement.



Transport Machinery Safely

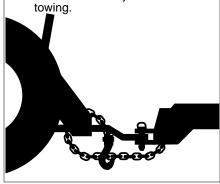
- ▲ Comply with state and local laws.
- Maximum transport speed for implement is 20 mph. DO NOT EXCEED. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain require a slower speed.
- ▲ Sudden braking can cause a towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes.

- ▲ Use the following maximum speed - tow load weight ratios as a guideline:
 - 20 mph when weight is less than or equal to the weight of tractor.
 - **10 mph** when weight is double the weight of tractor.
- ▲ IMPORTANT: Do not tow a load that is more than double the weight of tractor.



Use A Safety Chain

- A safety chain will help control drawn machinery should it separate from the tractor drawbar.
- ▲ Use a chain with the strength rating equal to or greater than the gross weight of the towed machinery.
- ▲ Attach the chain to the tractor drawbar support or other specified anchor location. Allow only enough slack in the chain to permit turning.
- ▲ Do not use safety chain for towing



2

Practice Safe Maintenance

- ▲ Understand procedure before doing work. Use proper tools and equipment, refer to Operator's Manual for additional information.
- ▲ Work in a clean dry area.
- ▲ Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
- ▲ Allow implement to cool completely.
- ▲ Do not grease or oil implement while it is in operation.

- ▲ Inspect all parts. Make sure parts are in good condition & installed properly.
- Remove buildup of grease, oil or debris.
- Remove all tools and unused parts from implement before operation.



Important Safety Information

These are common practices that may or may not be applicable to the products described in this manual.

Prepare for Emergencies

- ▲ Be prepared if a fire starts.
- ▲ Keep a first aid kit and fire extinguisher handy.
- ▲ Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.



Wear Protective Equipment

- ▲ Protective clothing and equipment should be worn.
- ▲ Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.
- ▲ Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating machinery.



Avoid High Pressure Fluids Hazard

- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by relieving pressure before disconnecting hydraulic lines.
- ▲ Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- ▲ Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- ▲ If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be treated within a few hours or gangrene may result.



3

Keep Riders Off Machinery

- ▲ Riders obstruct the operator's view, they could be struck by foreign objects or thrown from the machine.
- ▲ Never allow children to operate equipment.

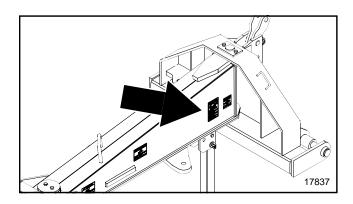


Safety Labels

Your 3-Way Rear Blade comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

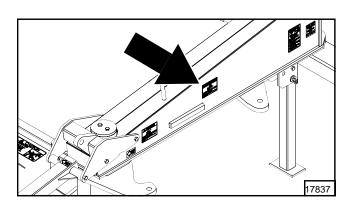
- 1. Keep all safety labels clean and legible.
- 2. Replace all damaged or missing labels. To order new labels go to your nearest Land Pride dealer or visit our dealer locator at landpride.com.
- 3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as

- specified by Land Pride. When ordering new components make sure the correct safety labels are included in the request.
- 4. Refer to this section for proper label placement. To install new labels:
 - a. Clean the area the label is to be placed.
 - b. Spray soapy water on the surface where the label is to be placed.
 - c. Peel backing from label. Press firmly onto the surface.
 - d. Squeeze out air bubbles with the edge of a credit card.





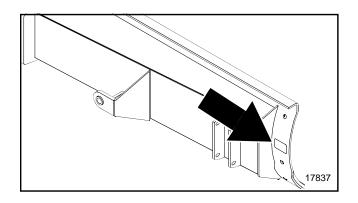
818-339CWarning: High Pressure





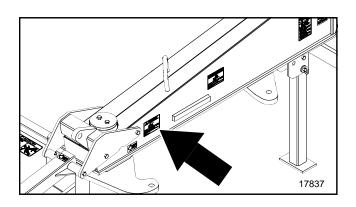
818-487CDanger Avoid Injury

Important Safety Information



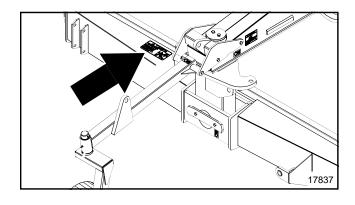


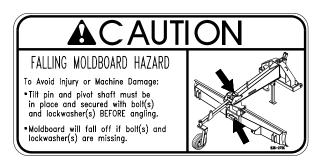
818-230CRed Reflector (Both sides)





818-491CWarning Pinch/Shear





838-075CCaution Falling Moldboard

5



Land Pride welcomes you to the growing family of new product owners.

This 3-Way Rear Blade has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance and safe operating practices will help you get years of satisfactory use from the machine.

Application

Land Pride's RBT55120 Series 3-Way Rear Blade is built tough from the ground up for applications ranging from landscaping, construction, snow removal, feedlot cleaning and all-around farm use. By using hydraulics at all three positions, time can be utilized efficiently by making changes on the go. Available options include single or double hydraulic gauge wheels, side plates for holding dirt in and skid shoes for blade protection.

See "Section 6: Specifications & Capacities" on page 23 and "Section 7: Features & Benefits" on page 24 for additional information and performance enhancing options.

Using This Manual

- This Operator's Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
- The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
- To order a new Operator's or Parts Manual contact your authorized dealer. Manuals can also be downloaded, free-of-charge from our website at www.landpride.com or printed from the Land Pride Service & Support Center by your dealer.

Terminology

"Right" or "Left" as used in this manual is determined by facing forward in the direction the machine will operate while in use unless otherwise stated.

Definitions

NOTE: A special point of information that the operator must be aware of before continuing.

IMPORTANT: A special point of information related to its preceding topic. Land Pride's intention is that this information should be read and noted before continuing.

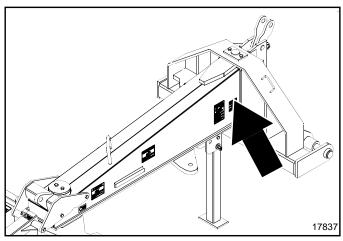
Owner Assistance

The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service. If customer service or repair parts are required contact a Land Pride dealer. A dealer has trained personnel, repair parts and equipment needed to service the Rear Blade.

The parts on your 3-Way Rear Blade have been specially designed and should only be replaced with genuine Land Pride parts. Therefore, should your Rear Blade require replacement parts go to your Land Pride Dealer.

Serial Number Plate

For prompt service always use the serial number and model number when ordering parts from your Land Pride dealer. Be sure to include your serial and model numbers in correspondence also. Refer to Figure 1 for the location of your serial number plate.



Serial Number Plate Location Figure 1

Further Assistance

Your dealer wants you to be satisfied with your new 3-Way Rear Blade. If for any reason you do not understand any part of this manual or are not satisfied with the service received, the following actions are suggested:

- 1. Discuss the matter with your dealership service manager making sure he is aware of any problems you may have and that he has had the opportunity to assist you.
- 2. If you are still not satisfied, seek out the owner or general manager of the dealership, explain the problem and request assistance.
- 3. For further assistance write to:

Land Pride Service Department 1525 East North Street

P.O. Box 5060 Salina, Ks. 67402-5060

E-mail address lpservicedept@landpride.com

Section 1: Assembly & Set-Up



Tractor Requirements Weight & Horsepower

Tractor rating should be between 90 - 180 horsepower. Tractors outside this range must not be used.

NOTE: Ballast may need to be added to your tractor to maintain steering control. Refer to your tractor's operator manual to determine if additional ballast is needed.

3-Point Hitch Assembly

A 3-Point Category II or III hitch is required. The lower 3-Point arms of the 3-Point hitch must be stabilized to prevent side-to-side movement. Most tractors have sway blocks or adjustable chains for this purpose.

Hydraulic Outlets

The number of required hydraulic duplex outlets at the tractor is dependent upon how the 3-Way Rear Blade is set-up.

- No outlets are required if the 3-Way Rear Blade is set-up with manual links and ratchet jacks only.
- One to three duplex outlets are required if the 3-Way Rear Blade is set-up with any one or more of the following hydraulic cylinders; Offset Cylinder, Tilt Cylinder and Angle Cylinder. Each cylinder will require a duplex outlet at the tractor.
- A fourth duplex outlet is required if a gauge wheel is purchased with a hydraulic cylinder.

A Selector Valve Kit may be purchased through your local Land Pride dealer if your tractor does not have the required number of duplex outlets. This kit provides a way to operate 2 cylinders with one outlet, thereby reducing the number of outlets at the tractor by one.

Land Pride Selector Valve Kit						
Part No.	Part Description					
300-154A	DOUBLE SELECTOR VALVE ASSY For use with two duplex outlets. Will allow operation of 3 cylinders with 2 tractor outlets.					

Hitch, Frame & Blade

1. Locate shipping crate on a level surface. Remove & separate blade assemblies from shipping crate.

IMPORTANT: Do not remove shipping block from the blade tilt housing until all cylinders and/or ratchet jack and manual links have been installed.

Refer to Figure 1-1:

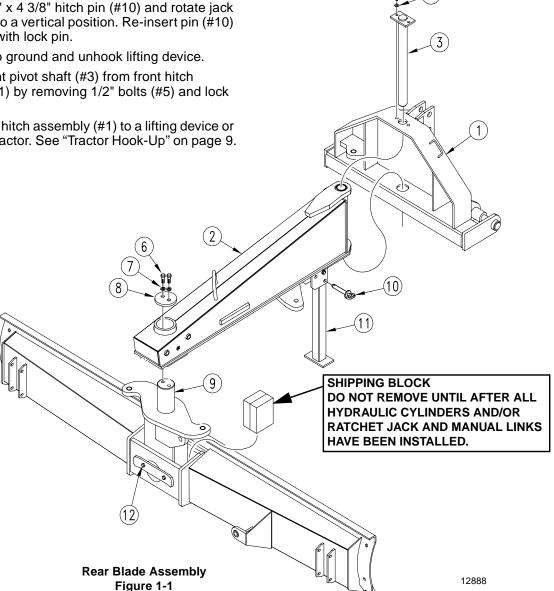
8

- 2. Use a lifting device to set blade pivot assembly (#9) upright, Remove bolts (#6), lock washers (#7) & pivot cap (#8) from blade pivot assembly (#9). Do not remove shipping block in the blade tilt housing.
- 3. Carefully insert blade pivot assembly (#9) into main frame (#2) at a 90° angle to the frame.
- Reinstall pivot cap (#8), lockwashers (#7) and 3/4"-16 x 1 3/4" GR5 hex head cap screws (#6). Tighten hardware to secure main frame to blade pivot assembly.
- Remove 3/4" x 4 3/8" hitch pin (#10) and rotate jack stand (#11) to a vertical position. Re-insert pin (#10) and secure with lock pin.
- 6. Lower unit to ground and unhook lifting device.
- 7. Remove front pivot shaft (#3) from front hitch assembly (#1) by removing 1/2" bolts (#5) and lock washer (#4).
- Secure front hitch assembly (#1) to a lifting device or attach to a tractor. See "Tractor Hook-Up" on page 9.

- 9. Insert main frame (#2) into front hitch (#1) as shown. Reinstall front pivot shaft (#3) and secure with 1/2" lock washer(#4), 1/2"-13 x 1 1/2" GR5 bolts (#5). Tighten hardware to secure front pivot shaft (#3).
- 10. If not already done, attach unit to tractor 3-point hitch. The top 3-point hitch pin and linch pin are to be supplied by the customer. See Figure 1-3 on page 9 for category settings.
- 11. Re-check all hardware for tightness. Torque all bolts to specifications as listed in the "Torque Values Chart" on page 11.



Always check all hardware for tightness before using the blade. The moldboard will fall off if 3/4" bolts (#6) and/or 1/2" bolts (#12) are missing



Section 1: Assembly & Set-Up

Tractor Hook-Up

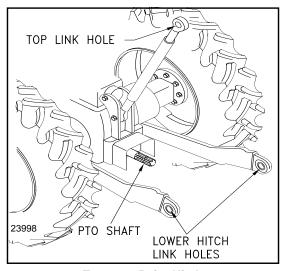
Refer to Figure 1-2 & Figure 1-3:



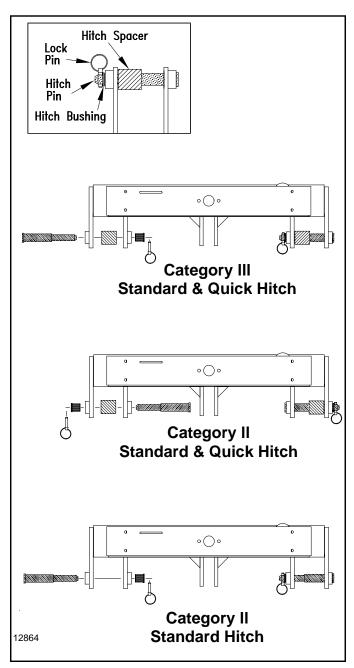
DANGER!

Tractor hook-up to equipment is dangerous and can result in serious injury or death. **Do not** allow anyone to stand between the blade and tractor during hook-up operations. **Do not** operate the hydraulic 3-point lift controls while someone is directly behind the tractor or near the blade.

- 1. Slowly back tractor up to the 3-Way Rear Blade while using the tractor's 3-point hydraulic control to align the lower hitch link holes with lower hitch clevis holes on the Rear Blade.
- 2. Engage tractor park brake, shut tractor engine off and remove key before dismounting from tractor.
- 3. With tractor's lower hitch arms aligned and positioned in the clevises, insert hitch pins through the clevis lugs and lower arm holes. Be sure to use the bushings as shown in Figure 1-3. Secure hitch pins with linch pins.
- 4. Connect top center link to the upper pivot hitch mounting holes using customer supplied clevis pin and linch pin.
- 5. Ensure that the lower hitch arms are blocked to prevent excessive side movement.
- 6. Remove hitch pin and raise support stand fully up. Reinsert hitch pin and secure with lock pin.
- Return to the tractor and slowly operate controls up and down to check for clearance. Make certain the Rear Blade does not interfere with the tractor hitch, tires, and drawbar. Move or remove the drawbar if it interferes.
- 8. Manually adjust one of the two lower lift arms up or down to level the Rear Blade from left to right.
- Manually adjust length of the top-link to level the Rear Blade from front to rear.



Tractor 3-Point Hitch Figure 1-2



Lower 3-Point Hitch Setting Figure 1-3

9



Blade Offset Cylinder

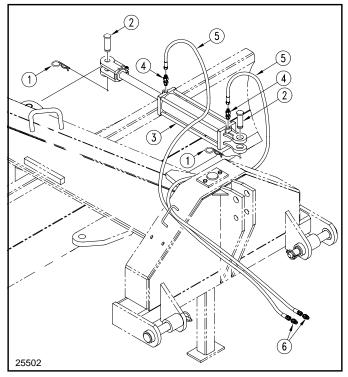
Refer to Figure 2-1:

IMPORTANT: Do not remove shipping block from the blade tilt housing until all cylinders and/or ratchet jack and manual links have been installed.

IMPORTANT: Attach cylinder base to the front hitch lug. The cylinder base will interfere with the main frame if attached to the rear lug.

Assemble the hydraulic hoses to the hydraulic cylinder before placing the cylinder on the blade.

- 1. Position hydraulic cylinder (#3) with ports on top as shown. Install two straight fittings (#4) into the cylinder ports as shown. Tighten as needed.
- 2. Screw 116" long hydraulic hoses (#5) into straight fittings (#4) and tighten.
- 3. Thread adapter fittings (#6) to the other end of the hydraulic hoses and tighten. (Hydraulic couplings not furnished.)
- 4. Attach hydraulic cylinder to the lugs located on the left side of the 3-Way Rear Blade with clevis pins (#2). Make sure hydraulic ports are positioned on top and the cylinder base in positioned to the front as shown.
- 5. Secure clevis pins with hair pin cotters (#1).
- 6. Route hoses through hose bracket located on the right side of the front hitch. Connect hoses to tractor's hydraulic system.



Hydraulic Blade Offsetting Figure 2-1

10

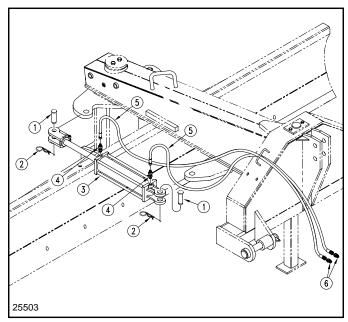
Blade Angling Cylinder

Refer to Figure 2-2:

IMPORTANT: Do not remove shipping block from the blade tilt housing until all cylinders and/or ratchet jack and manual links have been installed.

IMPORTANT: Attach cylinder base to the front hitch lug. If attached to the rear lug, the base will interfere with the main frame.

- Position hydraulic cylinder (#3) with ports on top as shown. Install two straight fittings (#4) into the cylinder ports as shown. Tighten as needed.
- 2. Screw 116" long hydraulic hoses (#5) into straight fittings (#4) and tighten.
- 3. Thread adapter fittings (#6) to the other end of the hydraulic hoses and tighten. (Hydraulic couplings not furnished.)
- 4. Attach hydraulic cylinder to the lugs on the right side of the frame with clevis pins (#1). Make sure hydraulic ports are positioned on top and the cylinder base in positioned to the front as shown.
- 5. Secure clevis pins with hair pin cotters (#2).
- 6. Route hoses through hose bracket located on the right side of the front hitch. Connect hoses to tractor's hydraulic system.



Hydraulic Blade Angling Figure 2-2

Blade Tilting Cylinder

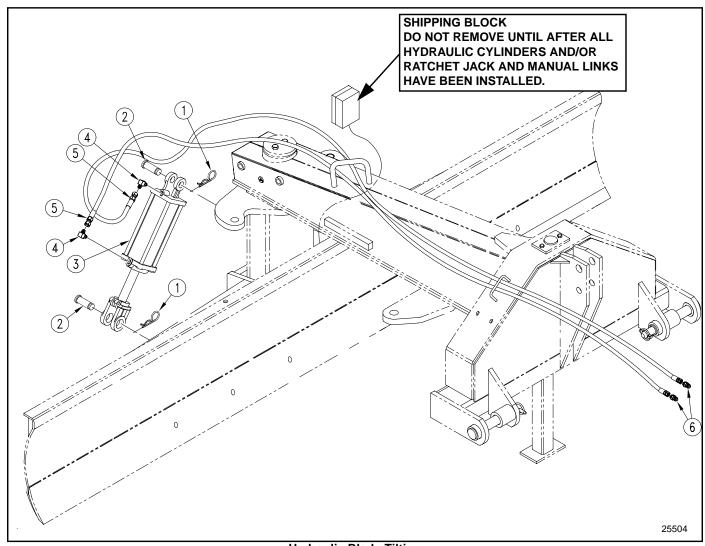
Refer to Figure 2-3:

IMPORTANT: Do not remove shipping block from the blade tilt housing until all cylinders and/or ratchet jack and manual links have been installed.

IMPORTANT: Assemble base end of cylinder to the lug located on the blade pivot as shown.

1. Install two 90 degree elbows (#4) into the hydraulic cylinder ports (#3) as shown. Tighten as needed.

- 2. Screw 140" long hydraulic hoses (#5) into elbows (#4) and tighten.
- 3. Thread adapter fittings (#6) to the other end of the hydraulic hoses and tighten. (Hydraulic couplings not furnished.)
- 4. Attach hydraulic cylinder (#3) to the lugs at the back of the blade with clevis pins (#2). Make sure hydraulic ports are positioned on the back and the cylinder base is mounted to the center lug as shown.
- 5. Secure clevis pins with hair pin cotters (#1).
- 6. Remove shipping block at this time.



Hydraulic Blade Tilting Figure 2-3

Manual Offset, Angling and Tilting

The manual links and ratchet jack may be used in place of the hydraulic cylinders.

IMPORTANT: Do not remove shipping block from the blade tilt housing until all cylinders and/or ratchet jack and manual links have been installed.

Manual Blade Angling

Refer to Figure 2-4:

12

- 7. Attach blade angling links (#3 and #4) to the right side of the Rear Blade as shown with two 1" clevis pins (#1). Secure with hair pin cotters (#5).
- 8. Adjust blade angle by removing hitch pin (#2) and moving outer link (#3) to a different hole. Replace hitch pin and secure with hair pin cotter (#5).

Manual Blade Offset

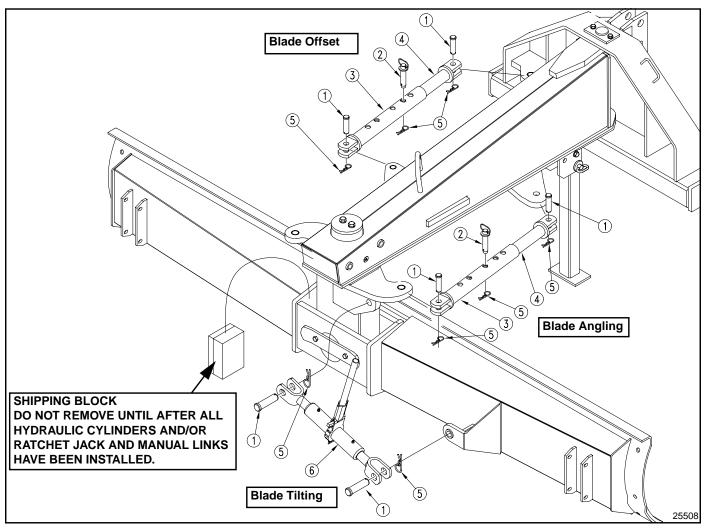
Refer to Figure 2-4:

- 9. Attach blade offset links (#3 and #4) to the left side of the Rear Blade as shown with two 1" clevis pins (#1). Secure with hair pin cotters (#5).
- 10. Adjust offset angle by removing hitch pin (#2) and moving outer link (#3) to a different hole. Replace hitch pin and secure with hair pin cotter (#5).

Manual Blade Tilting

Refer to Figure 2-4:

- 1. Attach ratchet jack (#6) to the back side of the Rear Blade as shown with two 1" clevis pins (#1). Secure with hair pin cotters (#5).
- Adjust blade tilt by setting the lock on the ratchet lever and pumping the lever back and forth to raise one end of the blade higher than the other end. Reposition ratchet lock and pump lever back and forth to tilt blade in the opposite direction.
- Remove shipping block after ratchet jack (#6) has been installed.



Manual Offset, Angling and Tilting Figure 2-4

Section 2: Options, Assembly & Set-Up

Gauge Wheel

Kit Bundles

301-149A HYDRAULIC SINGLE GAUGE WHEEL
301-150A HYDRAULIC DUAL GAUGE WHEEL
301-283A MANUAL SINGLE GAUGE WHEEL
301-248A MANUAL DUAL GAUGE WHEEL

Refer to Figure 2-5:

- 1. Attach gauge wheel mounting bracket (#11) to Rear Blade frame with two 3/4"-10 x 10 1/2" GR5 hex head bolts (#8). and 3/4" hex nuts (#10). Tighten nuts to correct torque.
- 2. Insert gauge wheel hitch tube (#9) in gauge wheel arm (#3).
- 3. Attach gauge wheel arm (#3) to mounting bracket (#11) with 3/4"-10 x 10 1/2" GR5 hex head bolt (#8). and 3/4" hex nut (#10). Tighten nut to correct torque.
- 4. Insert gauge wheel caster assembly (single wheel caster #1) or (dual wheel caster #2) in gauge wheel arm (#3) and retainer washer (#4). Secure caster assembly with 1/2" x 2 1/2" long roll pin (#5).
- 5. Attach center floating link (#12) to the front hitch with 1 1/4" x 1 3/4" hitch pin (#7). Secure with hair pin cotter (#6).

Ratchet Jack Option

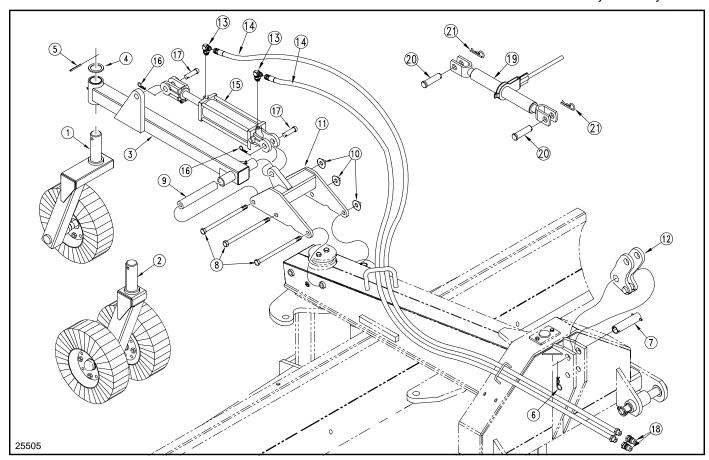
1. Attach ratchet jack (#19) to the mounting lugs on the gauge wheel arm (#3) and mounting bracket (#11) with two 1" clevis pins (#20). Secure pins with hair pin cotters (#21).

Hydraulic Cylinder Option

- 1. Position hydraulic cylinder (#15) with ports on top as shown. Thread 90 degree elbows (#13) into the two ports and tighten.
- 2. Screw 123" long hydraulic hoses (#14) to the elbows and tighten.
- 3. Thread hydraulic couplings (#18) (couplings provided by customer) to the other end of hydraulic hoses and tighten.

IMPORTANT: Assemble base end of cylinder to the front lug on the mounting bracket (#11) as shown.

- 4. Attach hydraulic cylinder to the lugs on the gauge wheel with two 1" clevis pins (#17). Make sure hydraulic ports are positioned on top and cylinder base is located to the front as shown.
- 5. Secure clevis pins with hair pin cotters (#16).
- Route the hoses through the hose brackets located on the top of the main frame and right side of the front hitch. Connect hoses to tractor's hydraulic system.



Gauge Wheel Assembly Figure 2-5

Hydraulic Selector Valve

Refer to Figure 2-6:

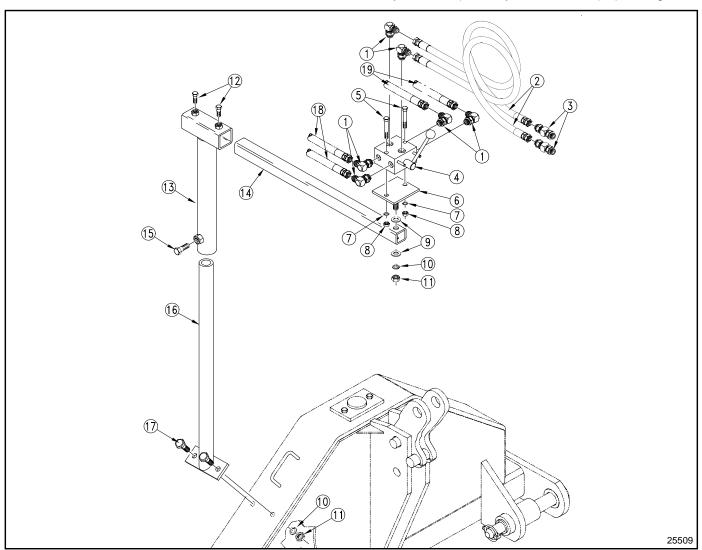
An optional hydraulic selector valve kit may be purchased that bolts to the front hitch frame. This kit provides a way to operate 2 cylinders with one outlet, thereby reducing the number of outlets at the tractor by one. See also "Tractor Requirements" on page 7.

Kit Bundle

300-154A Double Selector Valve Assembly

- Attach diverter valve stand (#16) to the hitch with two 1/2"-13 x 1 3/4" GR5 hex head cap screws (#17), spring lock washers (#10) and hex nuts (#11). Tighten nuts to the correct torque.
- 2. Attach adjustment tube (#13) to the stand with one 1/2"-13 x 3/4" GR5 hex head cap screws (#15). Tighten bolt to the correct torque.
- 3. Attach extension arm (#14) to adjustment tube with two 3/8"-16 x 3/4" GR5 hex head cap screws (#12). Tighten bolts to the correct torque.

- 4. Attach valve base plate (#6) to extension arm (#14) with two 1/2" flat washers (#9), lock washer (#10) and 3/8"-13 hex nut (#11). Tighten nut to the correct torque.
- 5. Attach double selector valve (#4) to valve base plate (#6) with two 3/8"-16 x 3" GR5 hex head cap screws (#5), spring lock washers (#7) and hex nuts (#8). Tighten nuts to the correct torque.
- 6. Apply teflon tape to the pipe threads of six 3/4 x 1/2MNPT elbows (#1) and screw them into the double selector valve (#4) as shown. Tighten to correct orientation.
- Attach blade offset hydraulic hoses (#18) to the right side elbows.
- 8. Attach hydraulic hoses (#19) from one of the other cylinders to the left elbows.
- Attach tractor connected hydraulic hoses (#2) to the top elbows.
- 10. Thread hydraulic adapters (#3) (couplings supplied by customer) onto hydraulic hoses (#2) and tighten.



Hydraulic Selector Valve Assembly Figure 2-6

Section 2: Options, Assembly & Set-Up

Skid Shoe

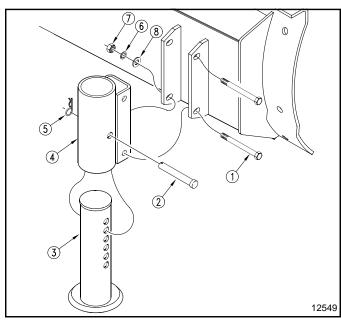
Refer to Figure 2-7:

The skid shoes are attached to both ends of the blade to help prevent damage to the surface of the ground by the blade.

Kit Bundle

301-110A SKID SHOE ASSEMBLY

- 1. Attach skid shoe mount (#4) with two 1/2"-13 x 4 1/2" GR5 hex head cap screw (#1), flat washers (#8), spring lock washers (#6) and hex nuts (#7). Tighten hardware to the correct torque.
- 2. Insert skid shoe (#3) into skid shoe mount (#4). Secure with clevis pin (#2) and hair pin cotter (#5).
- 3. Repeat steps 1 & 2 for the other side.



Skid Shoe Assembly Figure 2-7

End Plates

Refer to Figure 2-8:

End plates are attached to both ends of the blade, eliminating spillage when moving snow or loose material.

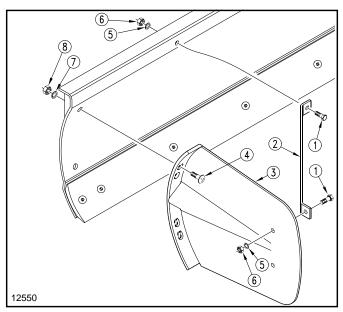
Kit Bundle

301-147A END PLATES

NOTE: Alternate tightening of bolts when installing mounting hardware. Some deflection may occur in moldboard.

- Attach right hand end plate (#3) to the moldboard as shown with two 5/8"-11 x 2" GR5 hex head cap screws (#4), spring lock washer (#7) and hex nuts (#8). Draw hex nuts up snug. Do not tighten.
- Attach side plate support strap (#2) with two 1/2"-13 x 1 1/4" GR5 hex head cap screws (#1), lock washers (#5) and hex nuts (#6). Draw hex nuts up snug. Do not tighten.

- 3. First tighten hex nuts (#8) to the correct torque and then next nuts (#6) last.
- 4. Repeat steps 1 and 3 for the left hand end plate.



End Plate Assembly Figure 2-8

Wear Plates

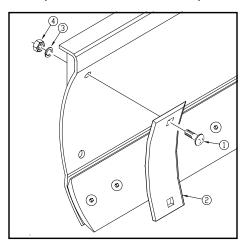
Refer to Figure 2-9:

Hardened wear plates are attached to both ends of the blade. These plates are designed to protect moldboard edges when blade is used for digging ditches or working abrasive material.

Kit Bundle

301-148A HARDENED WEAR PLATES (PAIR)

- 1. Attach wear plate (#2) to the moldboard with 5/8"-11 x 2" GR52 round head square neck bolt (#1), lock washer (#3) and hex nut (#4). Tighten hardware to correct torque.
- 2. Repeat step 1 for the left hand wear plate.



Wear Plate Assembly Figure 2-9

15



Blade Pitch

Blade pitch can be adjusted by lengthening or shortening the tractor's top center 3-point link.

Blade Offset

Manual Offset Adjustment

Refer to Figure 2-4 on page 12:

The blade offset has 15 adjustments up to 33" left or right. (Center position, 7 positions right and 7 positions left.)

- Manually adjust blade offset by removing hitch pin (#2) and moving outer link (#3) to a different hole position.
- Replace hitch pin and secure with hair pin cotter (#5).

Hydraulic Offset Adjustment



CAUTION!

The blade may come in contact with the tractor rear tire when offsetting blade to maximum position and angling blade in the same direction to most severe angle.

IMPORTANT: Never fully extend hydraulic offset cylinder or angle cylinder. Damage may occur.

Refer to Figure 2-1 on page 10:

The blade can be offset hydraulically by as much as 33" to the right or left with the offset cylinder.

- If the offset cylinder is attached to the selector valve, make certain the valve lever is set to operate that cylinder.
- 2. Operate tractor control lever to change blade offset by as much as 33" right or left.

Blade Angle and Reversing



CAUTION!

Avoid injury from falling blade by always check to make sure all hardware is secured properly before rotating blade.

Manual Angle Adjustment

Refer to Figure 2-4 on page 12:

There are 15 blade angle positions; up to 45 degrees right or left. (Center, 7 clockwise and 7 counterclockwise positions.)

- Adjust blade angle by removing hitch pin (#2) and moving outer link (#3) to a different hole position.
- Replace hitch pin and secure with hair pin cotter (#5).

- The blade may also be rotated around 180 degrees.
 - a. Disconnect angling link from blade turntable lug.
 - b. Rotate Rear Blade clockwise 180 degrees.
 - c. Reconnect angling link to turntable lug.

IMPORTANT: Make sure the angling link is properly re-installed before using the blade.

Hydraulic Angle Adjustment



CAUTION!

The blade may come in contact with the tractor rear tire when offsetting blade to maximum position and angling blade in the same direction to most severe angle.

IMPORTANT: Never fully extend hydraulic offset cylinder or angle cylinder. Damage may occur.

Refer to Figure 2-2 on page 10:

Adjust blade angle with angling cylinder by as much as 45 degrees clockwise and counterclockwise.

- 1. If the angling cylinder is attached to the selector valve, make certain the valve lever is set to operate that cylinder.
- 2. Operate tractor control lever to change blade angle by as much as 45 degrees forward or backward.
- The blade may also be rotated 180 degrees.
 - a. Disconnect angle cylinder from blade turntable
 - b. Rotate 3-Way Rear Blade clockwise 180 degrees.
 - c. Reconnect angle cylinder to turntable lug.

IMPORTANT: Make sure the hydraulic cylinder is properly re-installed before using the blade.

Blade Tilt



CAUTION!

Avoid injury from falling blade by always checking to make sure all hardware is secured properly before tilting blade.

Manual Tilt Adjustment

Refer to Figure 2-4 on page 12:

The blade end can be tilted manually by as much 30 degrees with the ratchet jack.

- 1. Set ratchet lock and pump lever back and forth to raise one end of the blade higher than the other end.
- 2. Reposition ratchet lock and pump lever back and forth to tilt blade in the opposite direction.

Hydraulic Tilt Adjustment

Section 3: Adjustments

Refer to Figure 2-3 on page 11:

The blade end can be tilted hydraulically with the tilt cylinder by as much as 30 degrees.

- If the tilting cylinder is attached to the selector valve, make certain the valve lever is set to operate that cylinder.
- 2. Operate tractor control lever to change blade tilt by as much as 30 degrees.

Gauge Wheel

Refer to Figure 2-5 on page 13:

The gauge wheel provides accurate depth control when grading, leveling or terracing. The height of the gauge wheel is determined by adjusting the ratchet jack or hydraulic cylinder.

IMPORTANT: The top center 3-point link can be removed from both the blade and tractor before using the gauge wheel accessory with the blade.

Manual Gauge Wheel Adjustment

- 1. Set ratchet lock and pump lever back and forth to raise the gauge wheel.
- 2. Reposition ratchet lock and pump lever back and forth to lower gauge wheel.

Hydraulic Gauge Wheel Adjustment

- If the gauge wheel cylinder is attached to the selector valve, make certain the valve lever is set to operate that cylinder.
- 2. Operate tractor control lever to change gauge wheel height up or down.



Operating Check List

Hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training involved in the operation, transport, maintenance and storage of the blade. Therefore, it is absolutely essential that no one operates the 3-Way Rear Blade without first having read, fully understood and become totally familiar with the Operator's Manual. Make sure the operator has paid particular attention to:

- Important Safety Information, pages 1 to 5
- Section 1: Assembly & Set-Up, page 7
- Section 3: Adjustments, page 16
- Section 4: Operating Procedures, page 18
- Section 5: Maintenance & Lubrication, page 20

Operating Checklist

~	Check	Reference		
	Check 3-point Hook-up procedure. Be sure all pins have been installed and are secured.	Page 9		
	All blade adjustments have been made and pins have been installed and are secured.	Page 8		
	The operator has read and understood how to operate the blade.	Page 18		
	The Rear Blade has been lubricated as required.	Page 20		
	Check the blade initially and periodically for loose bolts & pins, See <i>Torque Values Chart</i> .	Page 25		

Make the following inspections after attaching the 3-Way Rear Blade to the tractor:

- Inspect tractor safety equipment to make sure it is in good working condition.
- 2. Carefully raise and lower the implement to ensure that the drawbar, tires, and other equipment on the tractor do not contact the frame and moldboard.
- Carefully pivot Rear Blade fully clockwise and offset blade such that the moldboard end closest to the tractor is in line with the tractor tire. Raise and lower implement to ensure tractor tires and tractor do not contact the blade.
- 4. Carefully pivot Rear Blade fully counterclockwise and offset blade such that the moldboard end closest to the tractor is in line with the tractor tire. Raise and lower implement to ensure tractor tires and tractor do not contact the blade.
- 5. Inspect hydraulic hoses for wear, damage and hydraulic leaks. See "Avoid High Pressure Fluids Hazard" on page 3. Replace damaged and worn hoses with genuine Land Pride parts.

Transporting



CAUTION!

When traveling on public roads at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. Comply with all federal, state and local laws.

- When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
- Leave enough clearance on both sides of the Rear Blade when traveling straight or making turns to keep the blade from contacting obstacles such as buildings, trees or fences.
- 3. Slow down when traveling over rough or hilly terrain.

Basic Operating Instructions



WARNING!

Do not use blade tilt to raise tractor tires off the ground for repair. Improper use can damaged the 3-Way Rear Blade.



WARNING!

Do not operate the side shift cylinder with blade in the ground or to push or pull other objects. Improper use can damaged the 3-Way Rear Blade.



WARNING!

Do not use the Rear Blade for pulling fence posts, stumps, etc., lifting objects, carry objects or towing other equipment. Any of the above can result in 3-Way Rear Blade damage, serious bodily injury or death.



DANGER!

Never carry a person on the Rear Blade. A person can fall and be ran over by the Rear Blade or tractor causing serious injury or death.

IMPORTANT: Avoid catching hydraulic hoses on brush, post, stumps, and other protrusions that could damage and/or break them.

- 1. Thoroughly inspect the work area for buried utility cables, pipelines, sprinkler heads and any unforeseen objects. Mark any potential hazards.
- 2. Place grade stakes if you intend to develop a specific grade or soil level.
- 3. Adjust the blade to the desired angle, tilt, and offset position before lowering the blade to the ground.
- 4. Lower blade to the ground and proceed forward at a speed of no more than 2 to 4 mph. The blade should immediately begin shaving the soil surface.
- 5. Set the tractor's draft-link height control to the desired position. With the blade set at a 90 degree angle you may need to raise the blade slightly so that the dirt or gravel can flow out evenly under the blade effectively shaving off high spots and filling in potholes or depressions.

Section 4: Operating Procedures

General Operating Instructions

Once you have familiarized yourself with the Operator's Manual, completed the operations checklist, and properly attached your Land Pride Rear Blade to your tractor, you are now almost ready to begin work. The RBT55 Series Rear Blades were designed and built by Land Pride for category II and III three-point hitch and Quick Hitch attachment for 90 to 180 hp tractors equipped with remote hydraulic outlets and two wheel drive capability. They are ideal for snow removal as well as dirt leveling, finish grading, and backfilling applications at feedlots, outdoor arenas, building and construction sites, and maintenance operations on farm and ranch lanes or roadways. They are also excellent for soil contouring and construction and maintenance of ditches and waterways.

Hopefully you have checked out your work site for any buried utility cables, pipelines, sprinkler heads, or other obstacles that you wouldn't want to damage or encounter. Grade stakes should now be in place if you intend to develop a specific grade, elevation, soil contour, or roadbed crown. A RBT55 Series Rear Blade's primary purpose is for grading or leveling of soil, gravel, or aggregate in the warmer months or snow removal in the colder months. These functions are best done at an approximate 2 to 4mph ground speed. Becoming proficient with a Rear Blade takes practice.

Tractor horsepower, your personal skill level, soil or aggregate composition, moisture levels, and compaction factors will all have a definite impact on how easily and effectively you get the job done when you are in the dirt working mode. Develop a plan to achieve your expected results. Set the blade up at the proper angle or angles to do the job. The hydraulic angling, tilt, and offset capabilities of the RBT55 series will make these adjustments easy utilizing the tractors remote hydraulic controls. This may require some experimentation to achieve the desired results. Lower the blade to the ground and proceed forward at a speed of no more than 2 to 4 mph. The blade should immediately begin shaving the soil surface and dirt or aggregate material. Set the tractor's draft-link height control in the desired position. With the blade set at a 90 degree angle you may need to raise the blade slightly so that the dirt or gravel can flow out evenly under the blade effectively shaving off high spots and filling in potholes or depressions.

If you have the blade set at a horizontal angle, the shaved or accumulated material will begin to move outward toward the trailing edge of the blade. The greater the angle the more quickly the shaved material will be distributed off to the side. If it is necessary to work up next to a building foundation, abutment, or raised curb you may want to offset the blade so that the outside edge of the blade is beyond the outer edge of the tractor tire in working position. Back-filling operations may be more easily performed by reversing the blade and operating the tractor in reverse or commonly called the push mode.

If you are performing the construction of soil contours or waterways you will probably need to set a tilt angle on the blade to achieve the desired effect. If you are grading or cutting a new ditch bank or forming a road crown, you will probably want to offset the blade in combination with setting an appropriate tilt angle. This again will likely require some experimentation to gain desired results. Snow removal techniques with a blade will be very similar to dirt working techniques and will require a little experimentation to become proficient.

With a little practice you should become a very good operator and consistently achieve the desired results you expect with your Land Pride RBT55 Series Rear Blade.

See "Section 6: Specifications & Capacities" on page 23 and "Section 7: Features & Benefits" on page 24 for additional information and performance enhancing options.



Maintenance

Proper servicing and adjustment is the key to the long life of any implement. With careful and systematic inspection, you can avoid costly maintenance, time and repair.

After using your 3-Way Rear Blade for several hours, check all bolts to be sure they are tight.

Replace any worn, damaged or illegible safety labels by obtaining new labels from your Land Pride Dealer



WARNING!

Do not alter the 3-Way Rear Blade. Altering the Rear Blade can adversely affect its performance and reliability causing damage to the blade, tractor and/or bodily injury. Always replace damaged parts with original Land Pride parts.



DANGER!

Always secure the 3-Way Rear Blade in the up position with solid supports before servicing under the Rear Blade. Never work under equipment supported by hydraulics. Hydraulics can drop equipment if controls are actuated or if hydraulic lines burst. Either situation can drop the 3-Way Rear Blade instantly even when power to the hydraulics is shut off.



DANGER!

Avoid injury from falling moldboard by always checking to make sure all hardware is secured properly before rotating blade. Moldboard will fall if 3/4" pivot bolts or 1/2" tilt bolt and associated lockwashers are missing. A falling moldboard can damage the equipment, cause bodily injury and/or death.

Lubrication

Lubrication Legend

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Multi-purpose spray lube

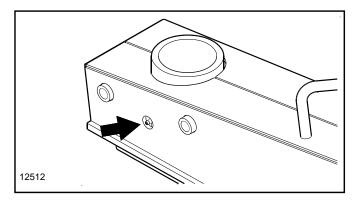


Multi-purpose grease lube





Intervals in hours at which

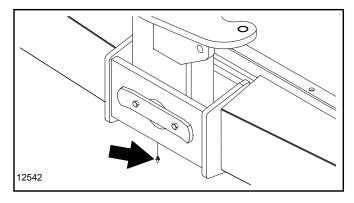




Blade Pivot Shaft

Type of Lubrication: Multi-purpose Grease

Quantity = Until grease emerges





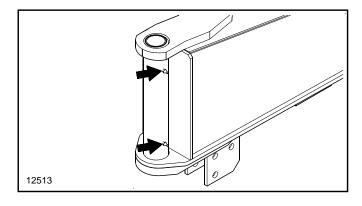
Blade Tilt Shaft

(Blade must be lifted off the ground for lubrication)

Type of Lubrication: Multi-purpose Grease

Quantity = Until grease emerges

Section 5: Maintenance & Lubrication

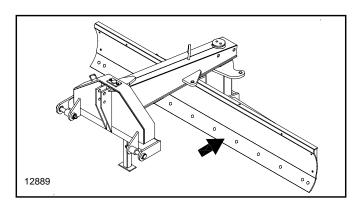




Front Pivot Shaft

Type of Lubrication: Multi-purpose Grease

Quantity = Until grease emerges



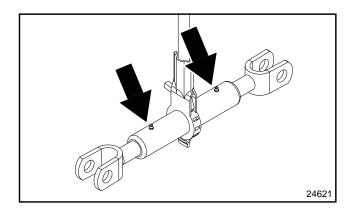


Moldboard and Blade

Grease moldboard and blade when storing for an extended period of time.

Type of Lubrication: Multi-purpose Grease

Quantity = Coat Generously

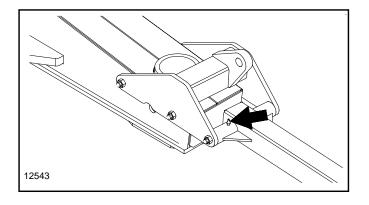




Ratchet Jack

Type of Lubrication: Multi-purpose Grease

Quantity = Until grease emerges

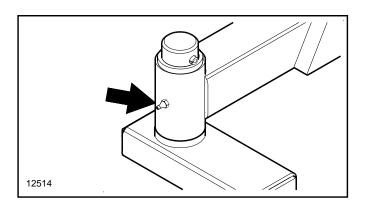




Gauge Wheel Front Pivot

Type of Lubrication: Multi-purpose Grease

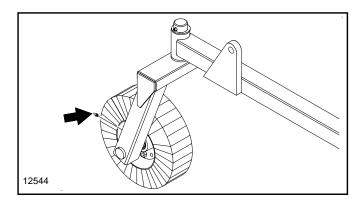
Quantity = Until grease emerges





Gauge Wheel Caster Tube

Type of Lubrication: Multi-purpose Grease Quantity = Until grease emerges



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Gauge Wheel Hub

Type of Lubrication: Multi-purpose Grease

Quantity = Until grease emerges

Section 6: Specifications & Capacities



RBT55120 Model							
	RBT55120						
Blade Width	120"						
Approximate Weight (lbs.) w/ manual links	1753						
Horsepower Rating	90-180						
Maximum G.V.W. (lbs.)	15,000						
Hitch Type	Cat. 2 & 3 (Fits Land Pride Quick Hitch)						
Blade Angle Manual Linkage: Hydraulic Cylinder:	15 positions up to 45 degrees clockwise and counter clockwise forward and same for reverse. (Center, 7 clockwise and 7 counter clockwise) Infinite number of positions up to 45 degrees clockwise and counterclockwise froward and same for reverse.						
Angle Cylinder	4 1/2" X 16"						
Blade Tilt Manual Ratchet Jack Hydraulic Cylinder:	Up to 30 degrees left and right. Infinite number of positions up to 30 degrees left and right.						
Tilt Cylinder	3 1/2" X 8"						
Blade Offset Manual Linkage: Hydraulic Cylinder:	15 positions up to 33". (Center, 7 left and 7 right) Infinite number of positions up to 33" left and right.						
Offset Cylinder	4 1/2" X 16"						
Moldboard Height	19"						
Moldboard Thickness	5/16" with reinforced channel						
Cutting Edge	1/2" x 6" Heat treated and Reversible						
Main Frame	Fully enclosed welded, formed box						
Parking Stand	Retractable						
Options	Skid Shoes, End Plates, Hardened Wear Plates, Single and Dual Gauge Wheel and Double Selector Valve						

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RBT55120 Model

Features	Benefits								
Warranty	One year parts and labor.								
Working widths	120"								
HP Range	90-180 HP								
Cat. 2 and 3	Bushing provided to go from Cat. 2 to Cat. 3 enables a wider variety of tractors to be used.								
Quick hitch compatible	Compatible with Land Pride Quick hitch for easy attachment and removal. Increases productivity.								
Angle up to 45 degrees	Various angles to move the desired amount of material.								
Tilt up to 15 degrees	Tilt up to 15 degrees to do various ditching duties.								
Offset up to 33 degrees	Offsets left and right enough to get moldboard beyond tractor tire or up against obstacles.								
Formed 19" moldboard with top lip reinforcement	Formed moldboard with 90 degree bent top for additional strength. Tall moldboard allows for a great deal of material to be moved.								
4" Solid steel kingpin	4" Solid steel is matched for workloads up to 180 HP.								
5/16" Moldboard with 1/4" reinforcement	Heavy-duty moldboard to handle loads from 180 HP tractors.								
Reversible cutting edge	Lengthens blade life by being able to turn cutting edge over and use other edge.								
Fully welded reinforced main frame	Overall mainframe strength is enhanced due to being fully welded.								
Retractable parking stand	Enables one person hook-up and keeps the mainframe off of the ground.								
Grease points in front pivot shaft	Helps front pivot shaft to easily move.								
Heavy-duty pivot assembly	1" Plate steel turntable and 4" kingpin handle tremendous torque delivered by up to 180 HP tractors.								
Skid shoes (Optional)	Skid shoes protect moldboard from hitting low lying obstructions such as manhole covers.								
Side plates (optional)	Side plates allow the blade to hold material in to drag from one spot to another.								
Hardened wear edges (optional)	Attach to outer edges of moldboard to prevent to wear in moldboard during ditching.								
Single or dual gauge wheels (optional)	Gauge wheels position the height of the blade to aid in grading.								

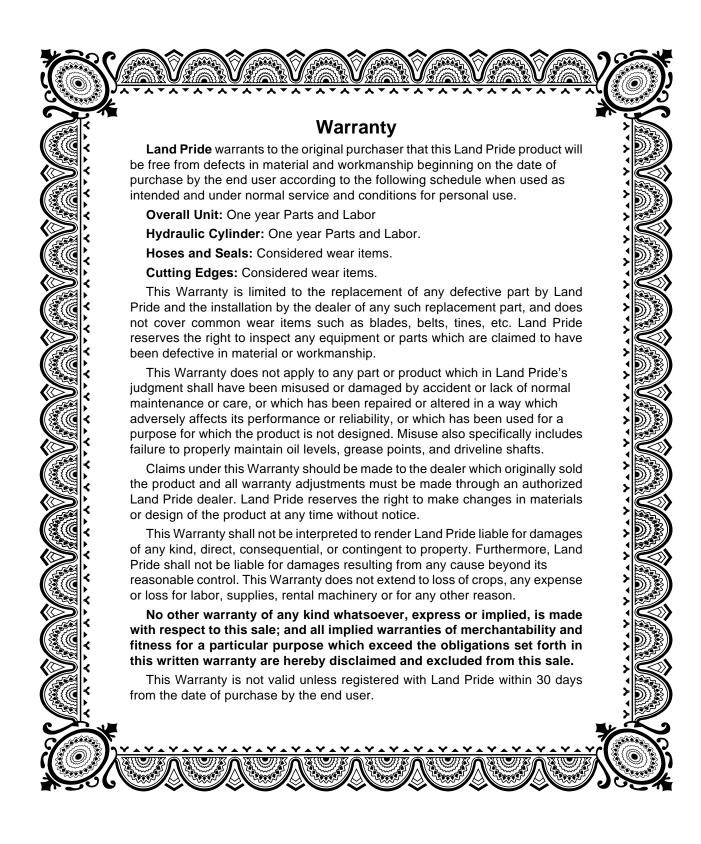


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Torque Values Chart														
Bolt Size (Inches)	Gra	de 2	Head Identification Grade 5 Grade 8		de 8	Bolt Size (Metric)	5.8 Bolt Class 5.8		Head Identifica		10.9 Class 10.9			
in-tpi ¹	N · m	ft-lb 3	N · m	ft-lb	N · m	ft-lb	mm x pitch	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb	
1/4" - 20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7	
1/4" - 28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11	
5/16" - 18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27	
5/16" - 24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29	
3/8" - 16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53	
3/8" - 24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62	
7/16" - 14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93	
7/16" - 20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97	
1/2" - 13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105	
1/2" - 20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150	
9/16" - 12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	1215	160	
9/16" - 18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230	
5/8" - 11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245	
5/8" - 18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300	
3/4" - 10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355	
3/4" - 16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450	
7/8" - 9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665	
7/8" - 14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780	
1" - 8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845	
1" - 12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550	
1-1/8" - 7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710	
1 1/8" - 12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700	
1 1/4" - 7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220	
1 1/4" - 12	750	555	1680	1240	2730	2010	¹ in-tpi = nomi	nal threa	d diame	ter in in	ches-thr	eads pe	r inch	
1 3/8" - 6	890	655	1990	1470	3230	2380	² N⋅ m = newton-meters							
1 3/8" - 12	1010	745	2270	1670	3680	2710	³ ft-lb= foot pounds							
1 1/2" - 6	1180	870	2640	1950	4290	3160	4mm x pitch = nominal thread diameter in millimeters x thread							
1 1/2" - 12	1330	980	2970	2190	4820	3560	pitch							
Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above.														

Notes

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